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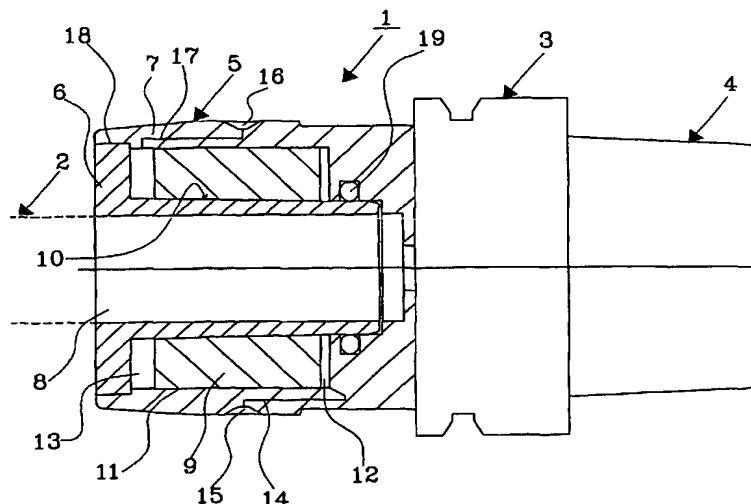
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: HYDRO MECHANICAL CLAMPING DEVICE



(57) Abstract: Hydromechanical clamping device, in particular in the form of a chuck or a mandrel, preferably intended to be, with one end thereof, mounted in a machining device, such as a drilling machine, a milling machine, a lathe machine etc., and with the other end to releasably hold a tool, such as a drill, a milling tool, a rotary saw blade, a grinding roll a work piece, a transition element etc., the clamping device comprising an inner sleeve and an outer sleeve. The inner sleeve and the outer sleeve encloses at least one chamber in which a clamping means in the shape of an annular piston is enclosed, which piston by means of hydraulically operating means is displaceable in the axial direction, wherein the piston and the inner sleeve and/or the outer sleeve have interacting conical surfaces which at axial displacement of the piston in one direction cause radial compression of the inner sleeve for clamping the tool. At axial displacement of the piston in the other direction the tool is released.

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## INTERNATIONAL SEARCH REPORT

International application No.

PCT/SE 03/01222

## A. CLASSIFICATION OF SUBJECT MATTER

IPC7: B23B 31/30 // B23B 31/40

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: B23B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPI, EPODOC, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	SU 1364405 A (PAVLODARSK IND I (SU)), 7 January 1988 (07.01.88), figure 1, abstract --	1-11
Y	WO 9406590 A1 (SAAB-SCANIA AKTIEBOLAG), 31 March 1994 (31.03.94), figure 1, abstract, ' --	1-11
A	EP 1108496 A1 (ETP TRANSMISSION AB), 20 June 2001 (20.06.01), figure 2, abstract --	1-11
A	US 6224067 B1 (STEFAN LINDSTROM), 1 May 2001 (01.05.01), figures 1,2, abstract --	1-11

☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>US 5054756 A (HELMUT RIEMSCHEID ET AL), 8 October 1991 (08.10.91), figure 1, abstract</p> <p style="text-align: center;">-- -----</p>	1-11

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